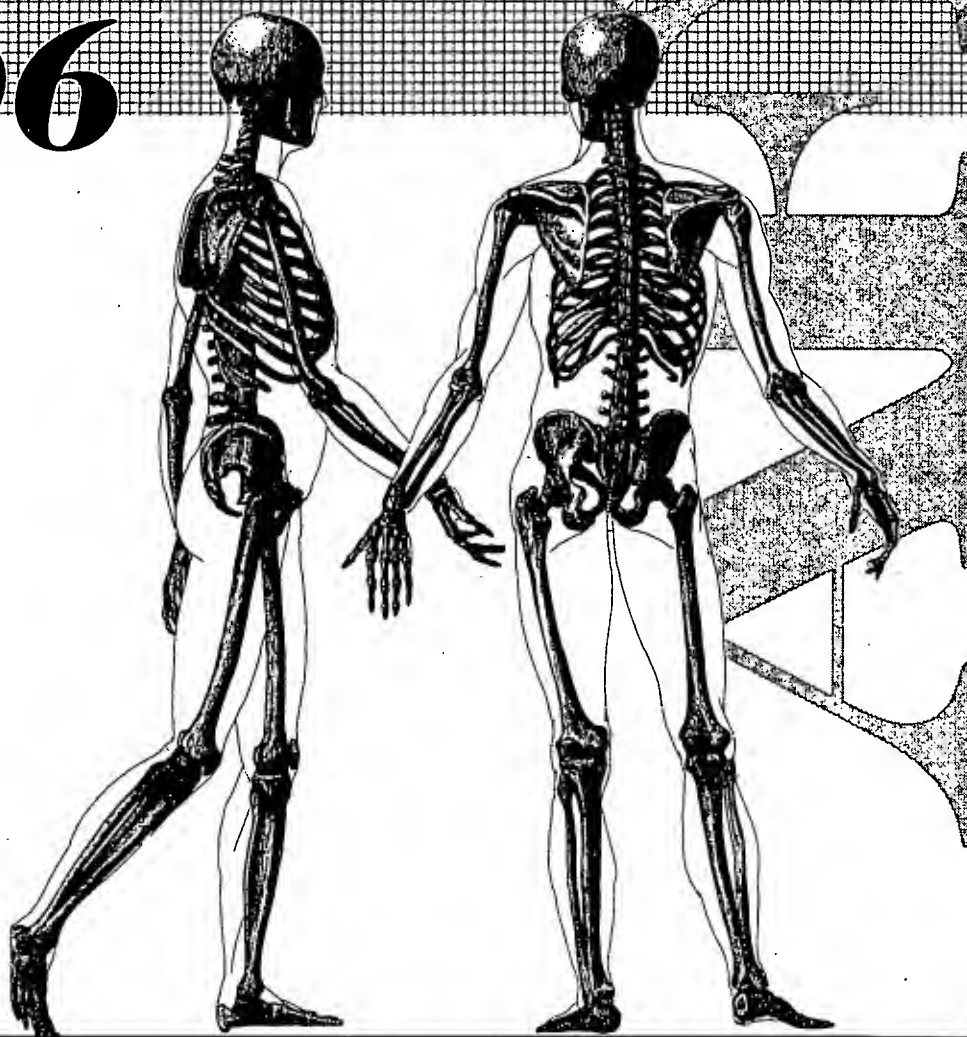


# ANNUAL REPORT

1996



Armed Forces Institute of Pathology, Washington, DC



# NATIONAL MUSEUM OF HEALTH & MEDICINE, AFIP

Adrienne Noe, Ph.D.

Director

Date of Appointment - September 1995

## OFFICE OF THE DIRECTOR

### MISSION/ORGANIZATION

The Office of the Director oversees the general activities and governance of the Museum and provides policy, technical, and scientific direction. This office also directs all planning activities for the site, facility, and programs of the new museum that is planned for the National Mall. Activities handled within the office are external relations, governmental affairs, press and public relations, and institutional development. The office works with print and broadcast media, congressional offices, and local, national, and community organizations to encourage contact with and coverage of AFIP's National Museum of Health and Medicine. We seek to emphasize the Museum's focus on critical public health issues, the importance of the Museum as a bridge between biomedicine and the general public, the Museum's role in helping to recruit the health professionals of tomorrow, and the Museum's research programs in medical history, medical anthropology, the epidemiology of chronic disease, human diet and nutrition, art in medicine, medical imaging, and other areas. The office provides general supervision of the Division of Public Programs and Exhibitions, and the Department Collections and Exhibit Division, and the Research and Development Division. The Office of the Director communicates and coordinates with the American Registry of Pathology (PL94-361) and the National Museum of Health and Medicine Foundation (PL 103-337) for institutional development.

### STAFF

Angela Exum, Clerk Typist  
Theresa Garrard, Administrative Assistant  
Carol Mahoney, Public Relations Specialist  
Adrienne Noe, Ph.D., Director  
Claire Thombs, Public Relations Intern

The Office of the Director has represented the NMHM within the Institute at numerous regular and special meetings, most notably by participating as a convener in the Institute's strategic planning process. In addition, extensive work toward revitalization and promotion of Museum programs has been completed with professional, medical veterinary, and other groups, federal organizations such as the National Institutes of Health, and all aspects of planning processes including those with the NMHM Foundation, Inc. The director is also the principle investigator in major grants for the Museum.

As part of a long-term effort to increase the effectiveness of the Museum's budget and staff efforts, the staff was directed to investigate potential collaborative projects with other museums and federal agencies. Possible activities include joint programming, collection collaborations, and shared exhibition development or installation. A detailed memorandum outlining these prospects will be completed next year.

During 1996, work began on two extended research projects. One is a selective history of the AFIP to complement the specific core issues that have emerged from the Institute's strategic planning process. Discussions on this project were held with members of the Institute's directorate, historians at other

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federal agencies, and officers of the Society for History in the Federal Government. A survey of relevant historical resources is being compiled. The results of this project may coincide with the 50th anniversary of the AFIP's reorganization as a tri-service organization under General Orders No. 32, Department of Army (1949).

The other project is an historical investigation on the public perception of the Museum. This project may assist staff of the Institute and other organizations to advance the Museum goal of relocating and expanding its public dimension. Initial research has been conducted in the Museum's Otis Historical Archives, the National Archives and Records Administration, and the Smithsonian Institution Archives.

## PUBLIC RELATIONS

In February, the Museum added to its staff a public relations specialist who developed a media plan focusing on establishing a corporate identity to increase local and regional recognition, with the long-range goal of obtaining national and international exposure.

During 1996, the Public Relations Department developed the Museum's first independent logo; designed the format and executed copy for a Museum educational programs marketing package; planned a major press event and exhibit opening ("Reckoning in Stone: Jill Lion on Breast Cancer"); obtained extramural support for marketing a flyer highlighting breast cancer educational programming; obtained the Museum's first Yellow Pages listing, which will place Museum information in the hands of 3.5 million potential local and regional visitors at distribution; coordinated an off-site exhibit in the Walter Reed Army Medical Center hospital lobby that showcases Museum activities and offerings; and facilitated media activity.

### TV/Film/Video

Film and video producers showed continued interest in the Museum during 1996. The Museum was profiled on *Voice of America*, and the director was interviewed by C-Span.

The Museum's collections and/or interviews with Museum collections staff were featured in a variety of projects, including the New Dominion Films production of *A Soldier's Story*, which aired on the Discovery Channel; a New Vision Pictures video release on the battle at Gettysburg; Maryland Public Television's documentary on local medical contributions during WWI; and a WGBH-TV Boston project on the history of medicine, still in production, which will air on a Public Broadcasting Station. In addition, the Museum was profiled on both the popular Children's series, *Inspector Gadget*, which airs on the History Channel, and the USA Network's news magazine, *Strange Universe*. Radio WHFS-FM, which targets the 18 to 34 age market, broadcast its popular morning show live from the Museum on Halloween. The broadcast and the subsequent free publicity continue to give the Museum local exposure and significant advertising time.

### Print

Articles on the Museum and specific exhibitions and programs appeared throughout 1996 in a variety of newspaper, magazine, and travel and marketing publications, including *The Washington Post*, *The Baltimore Sun*, *Washingtonian Magazine*, *Colours Magazine* (Paris, France), *Travel Holiday Magazine*, *The City Paper*, *The Takoma Voice*, *The Stripe*, and the *Travel Planner's Guide for Washington, D.C.* Regular features on the Museum appear in the *AFIP Letter*.

The Museum now appears in the American Chemical Society's *Guide to Science Destinations in the United States*, and is mentioned twice in the *AAA Travel Guide Mid-Atlantic Edition* with a regular listing and as a featured destination.

# DIVISION OF PUBLIC PROGRAMS & EXHIBITIONS

## MISSION/ORGANIZATION

The division coordinates operational and interpretive components of the Museum. This includes related administration, exhibitions, public programs, educational tours, facilities use, and other activities. The division staff works with governmental agencies, professional associations, museums, and individuals to develop interpretive strategies that promote greater public awareness of contemporary and historical perspectives of disease, public health, and health education.

## STAFF

- Lisa Berndt, M.F.A., Exhibit Planner
- Sarah Carey, B.A., Exhibits Specialist
- (D) Brigid Corsaro, BA, Visitor Services Representative
- (D) Raquel Olivario Cuadro, B.S., Visitor Services Representative
- Katherine J. (Freed) Epler, M.A.T., Visitor Services Manager
- Kathryn A. Foat, M.A.T., Public Programs Coordinator
- (A,D) Elizabeth Anne Goldentyer, B.A., Visitor Services Representative
- Robert I. Goler, M.A., Chief and Executive Administrator
- Jeanne Levin, B.S., Tour Programs Manager
- Susan Pasko, B.F.A., B.S.N., Visitor Services Representative
- (A) Gene T. Pittman, B.F.A., Visitors Services Representative
- (A) Marva A. Wroten, Visitor Services Representative

## *Docents*

Dr. Ed Beeman, Ms. Catherine E. Bonomo, Dr. Merlin Brubaker, Dr. Irving Cashell, Mr. James DePersis, Dr. Jason Geiger, Dr. Ira Green, Ms. Barbara Holts, Ms. Regina Hunt, Mr. Albert Jacobs, Mr. Sol Pargament, Ms. Colleen Pettis, Ms. Anne Pollin, Ms. Shirley Ross Pyke, Dr. Edward Rea, Dr. Stacy Rollins, Dr. S. Stephen Schiaffino, Ms. Enid Rosen, Dr. George Sharpe, and Ms. Rose Zimmerman.

## *Volunteers*

Dr. Donald Chakley, Ms. Sheree Blue, Ms. Lourdes Cabadino, Ms. Deanna Crouse, Ms. Evelyn Duckenfield, Ms. Ann Gardner, Ms. Peggy Garner, Mr. Shawn Garrard, Ms. Staci Gordon, Ms. Radha Gunupati, Ms. Jhumka Gupta, Ms. Vera King, Ms. Elaine Letcher, Ms. Marcy Levernz, Mr. Markus Ring, Ms. Sasha Peil, Dr. S. Stephen Schiaffino, Dr. Ed Beeman, Ms. Cathy Kim, Ms. Talisa Murray, Ms. Cheryl Price, and Mr. Keith Egli.

## *Interns*

Freddie Duclos, GWU/AFIP high school student intern  
Jessica Sutton, GWU/AFIP high school student intern  
Natalia Triana, GWU/AFIP high school student intern

## VISITOR SERVICES

### *Attendance*

Overall attendance at the Museum in 1996 was 37,773. The Museum was closed 10.5 days for electrical outages, snow days, and a chemical spill. Special events included programs by the

Museum for public audiences, receptions for organizations with missions related to the Museum, meetings or courses offered by other divisions of the Armed Forces Institute of Pathology, and meetings or training sessions from other units of Walter Reed Army Medical Center.

<i>Category</i>	<i>Number</i>
General Attendance .....	16,788
Tours (guided and unscheduled groups) .....	16,154
Special Events .....	4,831
Total	37,773

Analysis of attendance shows general development in the following areas. Overall attendance has decreased by 11% since 1995. The guided tour program increased substantially; the unscheduled groups decreased. The combined numbers of guided tours and unscheduled groups over the last 3 years also increased. The Museum suffers the same general decreasing attendance trend shown by other museums and cultural activities in Washington, D.C.

## **PUBLIC PROGRAMS OFFICE**

The Public Program Committee continues to guide the development of a range of educational programs offered at the Museum. In 1996, the committee paid special attention to developing ongoing programs made available to the general visitors of the Museum. These programs included the continuation of Discovery Carts, hands-on demonstrations conducted by volunteers on weekends; public tours offered in the summer; and Discovery Boxes, hands-on activities for young children.

Public Programs staff contributed to exhibition development by serving on committees and reviewing label copy.

Staff increased communication with our visitors through the Museum's visitor comment books, which offer perspectives about all aspects of the Museum. A concentration of comments about a single issue offers insight into visitor concerns, including exhibit content; responses to the collections; need for additional visitor services, and suggestions for exhibition topics.

### ***Programs Offered in 1996***

A Girl Scout Program, "All You Can Be!," met four of the six badge requirements for the Girl Scout guide, *Be Your Best*. The program coordinated instructors from WRAMC's Nutrition Program, AFIP's Physiology Division, and the Museum's docents and staff to present sessions on nutrition, exercise, human biology, and substance abuse prevention. Forty girls and fourteen adults participated.

A public lecture, "Taking Charge Of Your Health: What Everyone Needs to Know about Breast Cancer," was offered by Dr. William W. Funderburk. The American Association of Retired Persons contributed support for printing a flyer announcing the program and temporary exhibition. Booths staffed by volunteers presented information to the public. Organizations included: American Association of Retired Persons, American Cancer Association, Y-ME Breast Cancer Organization National Capital Area Chapter, and Mautner Group for Lesbians with Breast Cancer. Literature for distribution was provided by the National Cancer Institute and the Agency for Health Care Policy and Research.

The Museum also hosted its third "Educator's Open House" in October.

### ***Ongoing Programs***

The Museum offered 1-hour Summer Public Tours to walk-in visitors on the Wednesdays in June, July, and August. Reservations were not required, and attendance varied from 1 to 12 individuals per tour. The visitors comments were favorable, and we are working on expanding this as a permanent offering during the summer.

The current exhibitions offer increasing interpretative activities for preschool and lower elementary children. In response, the staff has developed a series of five "Discovery Boxes." Boxes include the following topics: wearing glasses, general anatomy and physiology, nutrition, belly buttons, and dental hygiene. The Discovery Boxes are borrowed from the Information Desk staff by an adult or older sibling. The family unit is encouraged to take the box into the gallery to do the activities together. Staff will conduct an informal survey early in 1997 with visitors to complete the text and design for final production of other boxes. We will develop additional topics in the future with future changing and permanent exhibitions.

### ***Tour Program***

Docents contributed 2,941 hours for guiding tours, developing content-based tours and participating in training. We concluded training for four additional docents. Armed Force Institute of Pathology staff and Uniform Services University of the Health Sciences faculty taught the remaining sessions. Topics covered included cardiology, museum collections, DNA, cell biology, medical, equipment, and tour techniques.

During the spring of 1996, we conducted a survey of teachers participating in guided tours. This sample provided a quantifiable tally of the comments teachers have made about the programs. Thirty-seven individuals responded. The survey asked for participants' views and their expectations for a guided tour, interactions with the docents, the length of the tour, and the style of presentation. Most overwhelmingly reported their expectations were met. The presentation styles, level of content covered, length of tour, and interaction with docents were favorably reported.

To increase marketing of the Museum to schools, staff and docents developed tours that align with school district curricula and support the national agenda of the American Association for the Advancement of Science "Project 2061: Benchmarks for Science Literacy." The new category of guided tours, "Curriculum Connections," is being marketed to teachers on a pilot basis this year. "Curriculum Connections" include the following tours:

"Human Body," a specialized tour targeted for students in high school anatomy and physiology courses, which uses the exhibition "Human Body/Human Being," models, and plastinated anatomical specimens to explore the body. The teacher may elect to view an autopsy film in addition to the hands-on guided tour. This year, 21 tours were conducted with this topic.

"Turning Points: The Nature of Medicine" uses selected exhibits to explore the dynamic combination of physics, biology, and chemistry through the history of American medicine. Docents Ed Rea, Ed Beeman, and Barbara Holts helped staff develop this tour.

Docents explored the interrelationships among public health, personal responsibility, prevention strategies, medical technology, research, and complex definitions of health and disease in the tour, "Progress Against Disease." Docents Catherine Bonomo, Colleen Pettis, Rose Zimmerman, and Jack Geiger worked with Kathryn Foat to design this tour.

Ongoing monthly training sessions are an important part of maintaining quality guided tours. This year sessions included practice tours for the three new "Curriculum Connection" tours, viewing the Howard Hughes Medical Institute Holiday Lecture series from 1995 on RNA and from 1996 on the immune system, the Museum's microscope collection, and a demonstration of the AFIP's scanning electron microscope.

Two field trips were planned as appreciation events for all of the Museum's volunteers to the National Arboretum in Washington, D.C., and the National Museum of Civil War Medicine in Frederick, Md., and guided tours of the Museum's warehouse collections storage in Gaithersburg, Md.

### ***Community Outreach and Collaborative Events***

Staff offered support of numerous AFIP and Walter Reed Army Medical Center-sponsored events, including the Ash Lecture, the Institute holiday party, AFIP student intern lectures, AFIP school

partnership programs with the Takoma Park School, and WRAIR student interns in science and engineering programs.

### ***Volunteers***

In addition to docents, in the volunteers in 1996 included student interns and volunteers of all ages who contribute their time and talents to assisting with the collections, staffing the Discovery Carts, researching exhibition topics, and producing curriculum for educational activities. The approximate number of hours contributed by these generous individuals in 1996 was 1,392.

### ***Physical Plant***

Public rest rooms were upgraded by installing baby changing stations, liquid soap dispensers, and air blowers in both the men's and women's facilities. New benches were located in the gallery and the lobby.

### ***Administrative duties as assigned***

With the assistance of the American Registry of Pathology, staff conducted personnel searches for a Museum public affairs officer and replacements for visitor services representatives. Kathryn Foat participated in the AFIP strategic planning process for internal operations. Various staff and volunteers of the Public Program Office provided tours to special visitors. These groups included the Thai Medical Military Officer Society of Air Force Medical Laboratory Specialists, the Hong Kong Museum of Health Staff, and numerous others.

### ***Professional Activities***

Staff made numerous professional contributions, including service as a member of the Museum Education Roundtable on the Program Planning Committee by Ms. K. Epler. Kathryn Foat served as one of three resource teachers representing area museums for students in the Museum Audiences Course at the George Washington University MAT Museum Education Program.

Mr. Goler prepared an initiative on museum accreditation, in part to determine the feasibility of obtaining formal accreditation from the American Association of Museums. A detailed briefing paper was completed for presentation. Of related interest was Mr. Goler's selection by the AAM to chair a visiting committee on accreditation for another institution.

He provided professional assistance to the museum field, including service on the Program Committee of the 23rd Annual Washington Historical Studies Conference, organization of a conference session on "Civil War Medicine" for that meeting, and peer reviews for two manuscripts related to the history of medicine. In August, Mr. Goler was appointed chair of the District of Columbia Awards Committee for the American Association for State and Local History (AASLH). Work also continued on the special issue of *Caduceus* for which Mr. Goler is serving as guest editor. Publication of this issue is scheduled for 1998.

At various points throughout the year, Mr. Goler also provided technical assistance to the Museum staff on institutional projects. These included providing information on the National Health Sciences Consortium and past exhibition initiatives and the completion of the collections management project under a memorandum of agreement with the Centers for Disease Control and Prevention.

## **PUBLICATIONS**

1. Goler R, *World War II and the American Dream* [temporary exhibit and catalog], National Building Museum (Washington, DC). *American Historical Review*. 1996;82:965-971.

## **PRESENTATIONS**

January 1996: Washington, D.C., The Octagon Museum, "Medicine in Early Washington,"

Robert I. Goler.

March 1996: Cooperstown, N.Y., Graduate Seminar on Material Culture, State University of New York, "Interpreting Medical History," Robert I. Goler.

August 1996: Charlottesville, Va., Health Sciences Library Professional Seminar, University of Virginia, "Exhibitions: Philosophical and Practical Issues," Robert I. Goler.

October 1996: Washington, D.C., 23rd Annual Conference on Washington Historical Studies, George Washington University/Historical Society of Washington, "Civil War Medicine," Robert I. Goler (moderator).

## EXHIBITIONS

The Museum continues to develop both temporary and long-term exhibitions projects during 1996 as well as provide basic environmental upgrades to the visitor experience.

*The National Museum of Health and Medicine: Dedicated to Health from the Civil War to the 21st Century:* Development and design for this exhibit began during the summer of 1995. The exhibit was completed and installed on March 7, 1996. The exhibit orients visitors to NMHM by providing information about the Museum's past history, current efforts, and anticipated future on the Mall. This exhibit emphasizes not only the Museum's public health efforts, but also its research accomplishments. A video, under development by the Public Programs Department, is planned for 1997.

*Pregnancy: Getting Off to a Good Start:* Offsite display May/June 1996. Development of this prototype exhibit was funded by a \$40,000 subcontract via Maryland Science Center (MSC) as lead institution for the Women's Health Project (WHP) of the National Health Science Consortium (NHSC), of which NMHM is a member. The exhibit unit was developed from December 1995 to April 1996 and prototyped in the Museum's Silliphant Hall before being displayed at the Maryland Science Center, along with exhibits from MSC, Oregon Museum of Science and Industry, and the Franklin Institute of Philadelphia. Installation of a permanent version of this prototype exhibit, including a laser disk interactive using HDAC-generated computer models of embryos at different stages of development, is being planned at NMHM in 1997. The proposal package that emerged from this prototype process was used by MSC to secure a \$1.5 million grant from the CDCP for a traveling exhibit on women's health to be developed by the NHSC. NMHM continues to be involved in the development of this exhibit through participation in the NHSC's exhibit committee.

*Research Matters: Learning about Lower Leg Injuries:* August 23 to present. This exhibit replaced the "In the News" case, a flexible format established in 1995 to facilitate generating small temporary exhibits in Hammond Hall. The exhibit focuses on research being done with NMHM and AFIP on the prevalence of lower leg injuries among women engaging in high-repetition exercises such as marching.

*Civil War Medical Illustration:* This exhibit, initially installed in December of 1994, used drawings, prints, and photographs to explore the techniques of medical illustrators during the Civil War. The exhibit was consolidated into the existing "Civil War Medicine" exhibit in August 1996. Light-sensitive materials were rotated out in November of 1996 and replaced with new artifacts.

*A Leader Falls: The Medical Investigation of Lincoln's Death:* This exhibit consolidated key artifacts from a former exhibit, "The Patient is Abraham Lincoln." New label copy was written and installed.

*The Brain: "The Human Body/Human Being"* exhibit is lacking an exhibit component on the brain. Background research, including from visitor evaluations, was conducted and an exhibit proposal generated.

*Discovery Cart:* A customer cart with space for teaching tools and banner was designed for the Public Programs Department. A completion date of January 1997 is anticipated.



*Temporary Exhibit Program:* The Museum's Silliphant Hall is dedicated to temporary installations. Three exhibits were rotated through the space during 1996. *Pasteur: His Life and Work:* December 13, 1995 to April 22, 1996. The exhibit was on loan from the Pasteur Foundation. It chronicled the scientific achievements of Louis Pasteur, as part of a centennial exposition sponsored by the Pasteur Foundation. A video accompanied the exhibit.

*Internal Landscapes:* American Society of Clinical Pathologists Photo Competition. April 26, 1996 to October 18, 1996. The Museum has been the repository for the winners of this annually held show since 1989. This installation highlighted 20 winners from 1980 to 1994, in the categories of light microscopy, electron microscopy, and gross photography.

*Reckoning in Stone:* Jill Lion on Breast Cancer. November 8, 1996 to April 12, 1996. This sculpture exhibit chronicles artist Jill Lion's experience of a double mastectomy. The installation is comprised of eight sculptures. The exhibit is supplemented by an 8 and 1/2-minute video interview with the artist, generated through WRAMC TV.

*Visitor Services:* New benches, security doors, and water fountain additions to Kathy's Physical Plant Section.

*Collection Care:* Sensitive artifacts were rotated off view in the "Doc" exhibit case on Vietnam medics. The exhibit cases in the "Evolution of the Microscope" exhibit were cleaned.

*Exhibits Committee:* The Exhibits Committee, chaired by Lisa Berndt, continues to monitor exhibit schedules and staff time allocation and to insure resonance between the current exhibit program and the Museum's long-term goals.

## DEPARTMENT COLLECTIONS & EXHIBIT DIVISION

### MISSION

The Collections Division of the National Museum of Health and Medicine preserves materials representing broad subject areas related to the history and practice of American medicine, military medicine, and modern medical and health issues and research. The responsibilities are: -To provide the highest level of professional care for the NMHM collections and their associated documentation.

- To collect objects, specimens, and related archival materials deemed significant and relevant to the missions of the NMHM.
- To support research, exhibits, and public programs through access to collections. The activity comprises three collecting divisions (Anatomical Collections, Historical Collections, and the Otis Historical Archives) and the Offices of the Conservator and the Registrar.

### STAFF

Lenore Barbian, Ph.D., Collections Manager  
 Alan Hawk, B.A., Collections Manager  
 Donna Scorzelli Quist, B.A., Assistant Collections Manager  
 Joan Redding, M.A., Assistant Archivist  
 Michael Rhode, B.A., Archivist  
 Paul S. Sledzik, M.S., Curator  
 Christina Sweet, M.S., Conservator  
 Jon Zachman, M.A., Registrar

Interns: Jessica Sutton

Volunteers: Marcy Leverenz, Sol Pargament, Markus Ring

Lenore Barbian joined the staff in November as collections manager in the Anatomical Collections. Her background in physical anthropology and computer data base management is an important addition to the collections staff.

## CURATION AND COLLECTIONS MANAGEMENT

The responsibilities of the division lie largely within the curation and management of the collections. These responsibilities encompass management of existing collections, the acquisition of new objects and collections (through following the collecting plan), registration of collections and objects, conservation of objects and collections, maintaining information about the collections, space management, and loans (both incoming and outgoing) of objects. The Collections Committee completed collecting plans for each collecting division and submitted these to the director, NMHM, for approval. Issues of curation and collections management were addressed in biweekly meetings of the Collections Management Committee.

### *Anatomical Collections*

The past year saw limited advance in the area of collections management while awaiting the hire of a collections manager. With the assistance of an intern, Jessica Sutton, cataloging of the Milton Helpert New York City Medical Examiner Collection was completed. With the help of other museum staff, rehousing of several collections (Shupe Veterinary Fluorosis Collection, Block Collection, and the Orthopedic Pathology Collection) was completed at the Gaithersburg warehouse.

### *Historical Collections*

A computerized inventory of artifacts stored in Hammond Hall, the Microscope storage area, the warehouse and the exhibit halls now includes 14,319 artifacts, approximately 98% of Historical Collections. The artifacts included are listed by catalog number, accession number, classification based on Medical Subject Headings, object name, and location. The Historical Collections Computer Catalog, which differs from the inventory by containing a more detailed description of the artifact, now includes 8,850 artifacts, approximately 63% of the collection. The 606 items cataloged in 1996 include new accessions, previously accessioned artifacts, and artifacts going out on loan.

### *Otis Historical Archives*

Joan Redding arranged, rehoused, and wrote finding aids for the Johnson, Suraci, and U.S.S. *Des Moines* collections. She added a significant accumulation of material to the AFIP historical files and updated the finding aid, completed the data base for the Woodward prints, assembled an index to the Woodward letter books, and completed various smaller processing projects. She and Michael Rhode cataloged additions to the Medical Ephemera, New Contributed Photographs, and General Medical Products Information Collections. Marcy Leverenz, a volunteer, continued cataloging the videotapes in the NMHM Audiovisual Collection and also worked on the Medical Ephemera Collection.

## OFF-SITE STORAGE FACILITY

During the past year, the Museum made significant progress in addressing collection management needs at its off-site storage facility in Gaithersburg, Maryland. Storage equipment, racking, and shelving were purchased for the facility. The Museum's historical artifacts and collections have all been surveyed, labeled, and measured for crating. The crating of several historical pieces was completed through the help of SID and a crating contract with ARTEX, a local museum-assistance company. Several rehousing projects were completed for Archives (Ackerman papers, Gorgas

Hospital pathology reports, general medical research files, and the Reeve Collection); Anatomical (Block Collection, Shupe wet tissue and skeletal material, and Popper Collection); Neuroanatomical (completion of Lindenburg rehousing; the Welker wet tissue, slide, glass plate, and photographic print collection, and the Blackburn Collection); and the Orthopedic Pathology-Codman Collection. An additional 140 brains in the Blackburn Collection were surveyed to determine refurbishing priorities.

Several safety issues were upgraded at the facility. An eyewash station was placed in the wet tissue storage area. Flammable storage cabinets were purchased for the rehousing of wet tissue material from the Shupe Collection, the Welker Collection, the Orthopedic Collection, and the Blackburn Collection. Minimal outfitting of the laboratory space was planned and equipment was purchased, including a portable fume hood, laboratory sinks, eyewash, and safety shower. Disaster supplies were purchased to help respond to a formalin spill, a water leak, or other potential disasters.

## ACQUISITIONS

The National Museum of Health and Medicine acquired 104 accessions during the past year. The addition of these unique artifacts, specimens, and archival material expanded the Museum's holdings by several thousand items.

Individuals who donated materials to the Museum include Eva Bernhardt, Dr. Michael Caplan, Elizabeth J. Cox, Col. David W. Dick, Bert Hansen, Alice J. Haupt, Alan Hawk, Cindy Hawk, Steve Hollingshead, Dr. Bernard Kirschbaum, M.D., Evelyn A. Lambros and Nichols W. Lambros, Dr. Craig Mallak, Barton J. Mallory, Jr. and Jeane J. Mallory, Wendy Miller, Dr. John Moad, P. O'B. Montgomery, Jr., M.D., Sabrina Moore, Sol Paragament, Henry Ponton, Donna Quist, Margaret Reid, Markus Ring, K. Daniel Rose, M.D., Michael Rosenberg, Professor Sam McGee-Russell, Pauline Suraci, John R. Thurlow, E.R. and C.E. White, and the estate of Wolf Citron.

Organizations that donated or transferred material to the Museum included the American Society of Clinical Pathologists; the Armed Forces Institute of Pathology; the United States Navy Bureau of Medicine and Surgery, Department of Naval Medical History; the Centers for Disease Control and Prevention; the Liberty Memorial Museum and Archives; the Office of the State Archeologist, Connecticut State Museum of Natural History; the Walter Reed Army Institute of Research Department of Space Biosciences; the Walter Reed Army Medical Center; the Wilford Hall Medical Center, Lackland AFB; and the United States Army (47th MEDSOM, 3rd Medical Command).

### *Historical Collections*

Significant additions to the Historical Collections include The Wilford Hall USAF Medical Center donation of the prototype high frequency oscillatory ventilator (HFOV) developed in 1980 by Dr. Forrest Bird, in collaboration with Wilford Hall. It was used in research studies to demonstrate the effectiveness of high-frequency ventilation in the treatment of respiratory distress.

The Centers for Disease Control and Prevention (CDC) donated a trunk of items used by the team of epidemiologists sent to investigate the Ebola outbreak near Kikwit, Zaire. Included in the trunk are sampling kits to collect specimens from potentially infected individuals. Also included in the donation were small traps used to catch rodents and a net used to catch birds in an effort to identify vectors.

Dr. P. O'B. Montgomery donated two versions of the Woodlawn Wanderer 9, the first automated cell culture laboratory designed for use in spacecraft. The devices, which took time-lapse photographs through a 40X microscope, were constructed to study the effects of a zero gravity environment on the growth of human cells. The first Woodlawn Wanderer 9 was intended for an *Apollo* mission that was cancelled after the *Apollo 13* mission; the second one was used in the *Skylab III* earth orbital mission in 1973.

Walter Reed Army Institute of Research transferred an example of their STL-A (Space Tissue Loss module "A") that was developed for use on the *Space Shuttle*. It was designed to culture cells in a zero gravity environment for study on earth. This example was assembled from the components used in early missions.

Dr. K. Daniel Rose donated a Habitrol nicotine transdermal patch autographed by the three original principal investigators—K. Daniel Rose, Jed Rose, and Murray Jacobwitz.

### **Otis Historical Archives**

In the Otis Historical Archives, collecting continued. Major acquisitions include the Suraci Collection (photograph albums and case studies from a plastic surgeon during World War II); the American Society of Clinical Pathologists 1995 photographic contest winning prints; the Johnson Collection (photographs and memorabilia from a 1931 Army School of Nursing graduate); and the U.S.S. *Des Moines* Dental Collection (post-World War II material from the dental office of a U.S. Navy cruiser). The Archives continued to receive AFIP material, including 12 boxes of records from the Registry of Radiation Biology. Departing staff member Greg Naranjo transferred his nutrition research material, and other staff members transferred their obsolete files. Many small donations of books, posters, pamphlets, trade literature, and photographs were added to the overall collection.

## **CONSERVATION**

Conservation treatments were completed on 67 objects from the collections; 12 anatomical specimens were refurbished. Significant projects included the treatment of 14 historical artifacts relating to the eye that were loaned for a traveling exhibition sponsored by the National Eye Institute, treatment of an accidental scratch on the Hammond portrait displayed on the exhibit floor, and the structural stabilization of a wax model displaying injection scars. Five paintings in the Archives' holdings were conserved outside the Museum. Portraits of Clement A. Finley, Thomas Lawson, George M. Sternberg, William C. Gorgas, and Robert O'Reilly were treated by Justine Wimsatt & Associates Art Conservation Studio. The Lawson and the Finley paintings are being considered for an updated version of the Civil War Medicine exhibit.

Several oversized historical artifacts stored in Hammond Hall were surveyed, inventoried, and measured for crating. The Archives' painting holdings were surveyed, inventoried, and measured to aid in designing a painting storage system. Disaster preparedness and response issues were evaluated, with particular focus on chemical spills and water leaks. A serious formalin spill on the exhibit floor and seven water leaks over the year prompted immediate evaluation of disaster procedures. An SOP for reporting a chemical spill in the Museum was written, along with temporary emergency procedures. Disaster supplies were purchased to help respond to a formalin spill, a water leak, or other potential disasters. A portable eyewash station was purchased for the wet tissue storage area in Hammond Hall.

The Museum lost its Conservation Laboratory due to AFIP space concerns. This loss has seriously and adversely impacted wet tissue maintenance and conservation treatments.

## **LOANS**

A total of 172 objects were loaned from the National Museum of Health and Medicine in 1996. This figure includes 96 anatomical specimens, 35 pieces from the Otis Historical Archives, and 41 artifacts from the Historical Collections.

Institutions that borrowed from the Museum included the American Academy of Neurology for an exhibit called "Training the 19th Century American Neurologist"; the Ansel Adams Center for Photography (San Francisco, Calif.) for an exhibit titled "Astronomy, Optics and Outer Space: Photography Beyond the Limits"; the Armed Forces Institute of Pathology; the Ellis Island Immigration Museum (Ellis Island, N.Y.) for an exhibit called "Doctors at the Gate: Public Health at Ellis

Island"; the Food and Drug Administration; GlaxoWellcome for the traveling exhibit, "Medicine: The Inside Story"; the Mutter Museum (Philadelphia, Pa.) for an exhibit titled "The President is the Patient"; the National Eye Institute—NIH for a traveling exhibition entitled "Vision"; the National Library of Medicine (Bethesda, Md.) for the exhibit "Emotion and Disease"; the National Museum of American History; the National Museum of Natural History; the Strong Museum (Rochester, N.Y.) for a traveling exhibition called "Altered States: It's All In Your Head"; Turner Original Productions; the Uniformed Services University of the Health Sciences (Bethesda, Md.); the University of Bradford, Department of Archaeological Sciences (Bradford, UK); and World View Pictures.

Prior loans were extended to the Franklin Institute of Science Museum (Philadelphia, Pa.), for a traveling exhibition titled "It's All in Your Head"; the Uniformed Services University of the Health Sciences (Bethesda, Md.); and the University of Iowa Hospitals and Clinics Medical Museum for their exhibition entitled "Order and Disorder: An Exploration of the Mind."

### ***Research Requests***

The division completed an extensive request from the Centers for Diseases Control and Prevention for information on materials related to AIDS and sexually transmitted disease within the Museum.

### ***Anatomical Collections***

The Anatomical Collections received 58 written and E-mail inquiries, including information requested from Tulane University School of Medicine; Gettysburg National Battlefield Park; the Department of Pathology and Laboratory Medicine at University of Minnesota School of Medicine; VAMC-Boise, Idaho; and the Chicago Historical Society. The collections staff provided assistance to the National Museum of Civil War Medicine in Frederick, Maryland, in the development of case histories of wounded Civil War soldiers. Several artists visited the collections this year to draw or photograph various pieces. These visitors included Ann Lovett, Sophie Bellissent, Ann Starr, and Ari Rousimoff.

### ***Conservation***

The Conservation Office received three requests for conservation information. These requests were for information on mold growth, storage of human hair, and artifact-handling guidelines for library collections. The researchers were affiliated with Reynold Library, University of Alabama at Birmingham, National Archives, and the Still National Osteopathic Museum.

### ***Historical Collections***

The Historical Collections responded to 175 written, telephone, and Internet inquiries. In addition, Alan Hawk provided technical assistance for the display of a pistol and other artifacts belonging to MAJ Walter Reed for the Command Suite at Walter Reed Army Medical Center. These artifacts were transferred to a new display case. Inquiries were received from Arnold E. Carlson, Museum of Connecticut Glass of Coventry, Conn.; Sarah Feldbauer, curator of collections, Historic Carlton Park Village and Museum of Hastings, Mich.; Joseph E. Garrera, researcher for the Lincoln Flag at the Pike County Historical Society of Milford, Pa.; Stephen Gehlbach, M.D., M.P.H., volunteer curator at Historic Deerfield of Deerfield, Mass.; Adi Gevins, producer of "Plagues Project," Turner Original Productions of Oakland, Calif.; Maj Connie Moore, U.S. Army Nurse Corps historian, U.S. Army Center for Military History of Washington, D.C.; and Christine Wolf, curator, Medical Museum, Iowa Hospital and Clinics of Iowa City, Iowa.

### ***Otis Historical Archives***

The Otis Historical Archives received 212 requests for information this year (not including Museum and AFIP requests, visitors, or referrals to other institutions). The number of requests increased by 18% from last year. Researchers were affiliated with the Smithsonian Institution, University of Iowa Hospitals and Clinics, *American History* magazine, Yale University, Kennedy Assassination Records Review Board, National Library of Australia, Cornwell Enterprises, World View Pictures, Power-



Joan Redding successfully applied to attend the competitive NHPRC Institute for the Editing of Historical Documents in June. She received training in historical editing for a projected publication of the Museum's 19th century records. In addition to exhibit scripts, Joan Redding edited press releases, brochures, job descriptions, and the draft of Rhode's book. She served as a member of the Museum's Public Programs Committee.

Michael Rhode completed his draft of a book on the Museum's Civil War photographs being coauthored with Dr. Blair Rogers. This included extensive research in primary sources both at the Museum and at the National Archives. The book will be published in 1997 by Duke University Press. He also wrote an introduction to a reprinting of an Army Medical Museum publication, *Photographs of Surgical Cases and Specimens*. This reprint of 400 photographs published by the Museum between 1864 and 1881 was privately published in 1996 by two doctors who are interested in the Civil War. The *Guide to the Collections at the National Museum of Health and Medicine* is essentially complete and ready for publication by the American Registry of Pathology. Photographic illustration selection is ongoing. He was appointed agency compliance official for the John F. Kennedy Assassination Records Review Board and will report on the AFIP's efforts to find material related to the President's death in 1997. He also served throughout the year on the AFIP's Institutional Review Board, the Human Subjects Committee.

Paul Sledzik successfully organized two courses in forensic anthropology this year. The ninth annual NMHM/AFIP course held at USUHS was attended by 40 students. In July, Anthony Falsetti traveled to the University of Bradford in England to cosponsor a version of the NMHM/AFIP Forensic Anthropology Course organized by Paul Sledzik. This course will be repeated in 1997. He was an author and reviewer for course material for the Mass Fatality Incident Train-the-Trainer Course held at the Emergency Management Institute in Emmitsburg, Maryland. He consulted with the USPHS and nonprofit groups about mass disaster mortuary response. He continued his role as an Advisory Committee member for the Skeletal Explorer Project funded by FIPSE and NSF at the Department of Anthropology at Cleveland State University. He continued as a researcher for the History of Health and Nutrition in the Western Hemisphere Project (funded by the National Science Foundation) at Ohio State University. He was a panelist at Malice Domestic VIII (mystery writers' conference) for two panels: "Everyone's an Expert" and "The Scientific Sleuth," held in Bethesda, Maryland.

Christy Sweet represented the Museum at the annual meeting of the American Institute for Conservation of Historic and Artistic Works. Ms. Sweet and Ms. Carey attended a Museum Exhibit Lighting Seminar sponsored by the National Park Service, Washington Conservation Guild, National Archives, and National Center for Preservation Technology and Training.

Jon Zachman attended the annual meetings of the American Association of Museums and the Smithsonian Institution's Registrar's Council. Mr. Zachman also attended a course sponsored by the National Preservation Institute called "Section 106 of the Historic Act: Review and Update for Practitioners."

## MEDIA REQUESTS

The 3M Health Care Corporation filmed several artifacts for their videotape, *Confronting Antibiotic Resistance: an Increasing Threat to Public Health*, in January. In November, several artifacts relating to the U.S. Army Medical Department Nursing Corps and reconstruction aids from Historical Collections were filmed by Maryland Public Television for an upcoming documentary about Maryland during the First World War.

Collections materials from the Anatomical Collections were filmed for several television and radio programs, including the Discovery Channel, *The Search for Dracula*; New Dominion Pictures/New Detectives Series, *Soldier Stories*; Halloween show for *The Morning Product*, WHFS radio (Annapolis, Maryland); and New Vision Productions, *Between the Bullet and the Battlefield*.

## PRESENTATIONS

Mar. 23, 1996: Washington, D.C., Smithsonian Institution, Civil War Medicine: Doctors in Blue and Gray, Smithsonian Resident Associate Program, cosponsored with the National Museum of Civil War Medicine, "Forensic Anthropology and Civil War Skeletons," Paul Sledzik.

June 29, 1996: Chicago, Ill., Second National Symposium on Dentistry's Role and Responsibility in Mass Disaster Identification, American Dental Association, "Physical Anthropology's Role in Identification of Disaster Fatalities," Paul Sledzik.

July 10, 1996: Silver Spring, Md., Suburban Hospital Lecture Series, "Selected Topics in General Medicine," "An Ambulating Hospital; the Hospital Trains of the U.S. Army during the Civil War," Alan Hawk.

Aug. 3, 1996: Frederick, Md., Civil War Medicine Fourth Annual Conference, National Museum of Civil War Medicine, "Great-Grandpa Was Shot Where? The Changing Uses of Civil War Medical Records," Michael Rhode.

Aug. 3, 1996: Frederick, Md., Civil War Medicine Fourth Annual Conference, National Museum of Civil War Medicine, "Legacy: The Medical Instrument Collection of the Army Medical Museum," Alan Hawk.

Oct. 19, 1996: Washington, D.C., 23rd Annual Conference on Washington, D.C., Historical Studies, "The Changing Uses of Civil War Medical Records," Michael Rhode.

Oct. 22, 1996: Toledo, Ohio, Overview of Medical Sciences for Embalmers, sponsored by the Lucas County Coroner's Office, the Medical College of Ohio, and the Ohio Embalmers' Association, "From Air Crashes and Wars to Bombings and Floating Cemeteries: The Identification of Casualties in National Emergencies," Paul Sledzik.

Nov. 1, 1996: Washington, D.C., University of California Washington Center, UCSC Research Seminar Series, "The Dead Do Tell Tales: Bones, Bodies and Burials," Paul Sledzik.

Nov. 14, 1996: Washington, D.C., Washington Society for the History of Medicine, "Surgical Photographs of the Army Medical Museum," Michael Rhode.

Nov. 20, 1996: Cleveland, Ohio, Skeletal Explorer Workshop Project and Department of Anthropology, Cleveland State University, "Skeletons, Coffins, and Vampires: What the Dead Can Tell a Skeletal Biologist," Paul Sledzik.

## PUBLICATIONS

1. Glenner RA, Willey P, Sledzik PS, Junger EP. Dental fillings from Civil War skulls: What do they tell us? *J Am Dent Assoc.* 1996;127:1671-1677.
2. Nelson AM, Sledzik PS, Mullick FG. The Army Medical Museum/Armed Forces Institute of Pathology and emerging infections: from camp fevers and diarrhea during the American Civil War in the 1860s to global molecular epidemiology and pathology in the 1990s. *Arch Path Lab Med.* 1996;120:129-133.
3. Sledzik PS. Federal resources in mass disaster response. *Cultural Resources Management.* 1996;19:19-20.
4. Sledzik PS. Return of the dead: the cemetery flood disasters of 1993/1994. *Emergency Medical Services/Rescue Technology.* June 1996.

### Book Chapters

1. Rhode M. Introduction. In: Bengston BP, Kuz JE, eds. *Photographic Atlas of Civil War Injuries.* Grand Rapids, Mich: Medical Staff Press; 1996.



# RESEARCH & DEVELOPMENT

## MISSION/ORGANIZATION

The division is responsible for research collections that encourage use of their resources by all qualified members of the research community. The collections are being made accessible to students and the general public through a website and the 3-D models that are displayed there. Continued stimulation of new hypothesis-driven research is a central goal.

The Human Development Anatomy Center has entered its 4th year of funding by the National Institutes of Child Health and Human Development, the National Center of Research Resources, and the Office of Research on Women's Health, with additional support from the National Library of Medicine. The Neuroanatomy Collections continue to be the recipient of the National Science Foundation funding for electronic collections development.

## STAFF

Adrianne Noe, Ph.D., Director  
Archibald Fobbs, Museum Specialist  
William Discher, Imaging Specialist  
Elizabeth Lockett, Imaging Specialist

### *Adjunct Scientist*

Dale Huff, M.D., Department of Pathology, Magee Womens Hospital, Pittsburgh, Pa.  
Marilyn Koering, Ph.D., Professor of Anatomy, Department of Anatomy, George Washington University Medical School, Washington, D.C.

### *Volunteers*

Edward Beeman, M.D.  
Shawn Garrard  
James Petras, Ph.D., Neurotoxicology, WRAIR  
Cheryl Price  
Stephen Schiaffino, Ph.D.

### *Student Interns*

Catherine Kim  
Talissa Murray

## COLLECTIONS

Human Developmental Anatomy Center  
Carnegie Institution Human Embryological Collection  
Hooker Humphrey Collection  
The Elizabeth Maplesden Ramsey Collection  
George Sledgwick Minot Embryological Collection  
Arey-Dapena Pediatric Pathology Collection  
Gaenssler Pulmonary Pathology Collection  
AFIP Temporal Bone Registry

## NEUROANATOMY

Yakovlev-Haleem Neuropathology and Developmental Collection  
Blackburn-Neuman Collection  
Lindenberg Forensic Pathology Collection

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## WEBSITE

The website implemented by the National Library of Medicine for the Human Developmental Anatomy Center continues to expand. The staff has addressed many requests for images from the site and project for use in educational CDS, books, and journals. Several universities and medical schools have asked permission to use some or all of the site in their own Internet sites for their students. The site is receiving about 30 to 40 accesses per day, with this number steadily increasing. Current plans for expansion and revision of the site are underway by the HDAC staff.

## ACQUISITIONS

*Human Developmental Anatomy Center*

In 1996, the Anatomy Center acquired the George Sledgwick Minot Collection from the Harvard Medical School. This collection consists of 100 embryological specimens and a large number of old and rare journals. The journals are currently being placed in acid-free envelopes and inventoried for scholarly access.

## Neuroanatomy Anatomy

The Neuroanatomy Division acquired the Wally Welker Collection of comparative mammalian brains from the University of Wisconsin, Madison. Museum staff, including Archibald Fobbs, Christy Sweet, and Jon Zachman traveled, to the University of Wisconsin to survey, inventory, and pack the collection for shipment to the Museum.

A grant from the National Science Foundation continues to fund activities to relocate the comparative neuroanatomy collections of the University of Wisconsin and Michigan State University to the National Museum of Health and Medicine, make the brain collections accessible using the development of a CD-ROM for the Internet, catalog the brain collections, and develop a retrievable data base of research resources. This year, the Welker Collection of Comparative Neuroanatomy was moved from Madison, Wisconsin to the Museum annex in Gaithersburg, Maryland.

## CONSERVATION

## Human Developmental Anatomy Center

Late in 1996, the Human Developmental Anatomy Center underwent renovations to improve security and use of space. The Gaenssler Collection and the AFIP Temporal Bone Registry were relocated to the warehouse, where they will be available to researchers upon request. Modular offices provided by AFIP were installed in G-035 to provide security for the computers used in the imaging project and to secure personal property. There is now a space for visitors to view the computer. The main collections area was rearranged to generate space for researcher and volunteer activities. Photographs and acetate models were placed in acid-free boxes and envelopes and replaced on their shelves. New map cases were installed to hold many large photographs and drawings previously left in the open. The Ramsey Collection journals, with the journals from the Minot Collection, were taken from their storage boxes and placed in filing cabinets to make them accessible to researchers. Eventually, these will be organized according to author and subject, then incorporated into the larger journal collection from the Carnegie Collection.

### *Neuroanatomy*

Due to the South Wing renovations, the wet tissue conservation for the Yakovlev-Haleem Collection has been moved to the Walter Reed Army Institute of Research (WRAIR). Tissues will continue to have their levels regularly monitored and changed as needed.

In the resource area, cabinets with chemical-free surfaces were purchased and the documents were housed in acid-free boxes. To prevent further ultraviolet light damage, protective lenses for the overhead lights will be installed in the future. Conservation of slide material was also necessary during 1996, as many of the slide trays located in the moveable isle system were damaged. New slide trays are being introduced into the collection.

The Blackburn-Neumann Collection wet tissue evaluation and conservation efforts continue. Documents from this collection that were housed in old file cabinets were transferred to acid-free containers and labeled. These items were organized and placed on new racking and shelving at the annex. Tissue blocks found in cardboard boxes were removed, placed in acid-free boxes, and labeled. Photographs and neuroanatomic drawings have been rehoused in map cases. An additional 140 brains in the Blackburn Collection were surveyed for determination of refurbishing priorities.

The Lindenberg Forensic Neuropathology Collection has been housed in acid-free containers. Microscope slides have been grouped according accession date. Lantern slides have been rehoused in acid-free boxes and placed on shelving or in the moveable aisle system.

The Meyer Collection, once stored on pallets, has now been organized and placed on shelves for researcher access.

### *Equipment*

Several new Silicon Graphics computers have been added. One of these will become a dedicated webserver; another is detailed to become a high and graphics imaging station. Several other PCs have been added. These will be equipped with digital cameras for researchers electronic imaging and electronic transfer of files to their home stations.

## **RESEARCH**

### *Human Developmental Anatomy Center*

There were numerous requests to use the collections. The Anatomy Center hosted Dr. Joseph Altmann and Dr. Shirley Bayer from the University of Indiana, who use the collection as the basis for their research on the development of the human brain. Dr. Bayer and Dr. Altmann were in residence several weeks. Dr. Virginia Diewert from the University of British Columbia evaluated development of the upper palate and the brain. Dr. H. Von Straaten of the Netherlands made use of the photographic collection to measure somite development. Dr. Anatole Dekeban visited from the University of Washington to finish his series on the development of the brain.

The Anatomy Center has begun a joint project with the Congenital Heart Research Center at the Oregon Health Sciences University. The Congenital Heart Research Center staff will be using several of the heart models generated here, as well as images of histologic sections, for clinical research and patient education. It will also be providing a graduate student to be resident at the Center to image new embryos for reconstruction by the Anatomy Center and OHSU.

### *Neuroanatomy*

Neuroanatomy collections were the focus of over 20 different research collaborations. The number of researchers visiting the collections during 1996 totaled 100, an increase of 60% over 1995. The total number of research days in 1996 was 300.

Dr. Shirley Bayer and Dr. Joseph Altmann from the University of Indiana are using the collection to

study the development of the brain. This project will culminate in the production of a three-dimensional reconstruction of specimens from the Yakovlev-Haleem Collection. An atlas of the human brain employing histological images to illustrate the various structures and stages of development will be published as a result of this research. Dr. Daniel Buxhoeveden of Thought Form, Inc., San Diego, California, and Dr. Sandra Witelson of McMaster University, Hamilton, Ontario, Canada, are using the Yakovlev-Haleem Collection for two projects: One is an evaluation of the early maturation of cells in the cortex of Down syndrome patients; the other is an investigation of laterality in primates and humans in layers three and four of the temporal cortex.

Dr. Maurice Pito and Dr. Denis Boire from the University of Montreal are examining the postsurgical records of patients with hemispherectomies where the hippocampus was not removed.

Dr. Svilen Tzonev of the University of Illinois at Urbana-Champaign used the collection to capture "Morphogenesis of the Lateral Geniculate Nucleus in Primates." Using specimens from the Yakovlev-Haleem Collection, Dr. Tzonev described the development of the lateral geniculate nucleus using three-dimensional reconstructions of FTP's images from the collection.

Other research projects involving the collection are a gyrification index study by Dr. Este Armstrong and Dr. William Byne of Mount Sinai Hospital and "The History of Neuropathology" by Dr. James Henry of the Department of Neuropathology, Armed Forces Institute of Pathology.

## TOURS

The Anatomy Center had approximately 25 tours this past year; the Neuroanatomy Center hosted six tours.

## PRESENTATIONS

### *Human Developmental Anatomy Center*

May 1996: William Discher, "The Human Developmental Anatomy Center and the Development of Its Website," Annual Meeting of the American Association of Clinical Anatomists, Omaha, Nebraska.

October 1996: Dale Huff, M.D., E.C. Lockett, W. Discher. "The Mesonephric Duct Ectodermal Ring Relationship in the Embryology of Epididymal-Testicular Descent: A Computer-Assisted 3-D Reconstruction Study," Annual Meeting of the American Academy of Pediatrics, Urology Section, Boston, Mass.

### *Neuroanatomy*

November 1996: A. Fobbs, Neuroanatomy CD-ROM Prototype Presentation at the Society of Neuroscience Annual Conference, Washington, D.C. During 1996, special programs were developed to encourage school groups and individual students to visit the Museum. Presentations on "Structures and Functions of the Brain" were offered to students from Takoma Park Elementary School; Rappahannock High School, Rappahannock, Virginia; and District of Columbia public schools.

April 8, 1996: Adrienne Noe, "Museums and Basic Biology Sciences," George Washington University Medical School, Department of Anatomy, Washington, D.C.

June 5, 1996: Adrienne Noe, "The New Medical Museum," Rotary Club, Washington, D.C.

November 1, 1996: Adrienne Noe, "Anatomy and the New Museum," American College of Physician Annual Meeting, Rosslyn, Virginia.

## PUBLICATIONS

1. Noe A. Serial sections and human embryology. A Noe Research Institute, Computerize Medical Imaging and Graphics. 1996;20:415-422.